# Proactive environmental activism to promote the remediation of mined land and acid mine drainage: a success story from the South African goldfields

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**Abstract** The paper will critically debate the success achieved of the FSE's POEA approach regarding environmental problems in the Far West and the West Rand goldfields. As more information on the environmental conditions reached the public since 2007, a new type of activism emerged empowered by freedom of speech, knowledge and liberalization. The founding of the South African Federation for a Sustainable Environment (FSE) in October 2007 supported the growth of Proactive Oppositional Environmental Activism (POEA) in the former West Rand and Far West Rand goldfields of the Gauteng Province of South Africa. FSE activists together with others have engaged with mines and the government to address the serious, often health threatening mine waste and acid water issues.

Key Words Acid mine drainage, Environmental laws, Public Participation, Environmental activism.

#### Introduction

Proactive oppositional environmental activism (POEA) regarding mined land in South Africa is a new phenomenon (Tempelhoff, 2004; Liefferink, 2006—2010; proactive in this context is simply defined as an approach to a situation by causing something to happen rather than waiting to respond to it after it happens). Gold mines of the Witwatersrand had been the cornerstone on which the wealth of the country was built. (Van Eeden, 2006). Until the 1960s, activism in this country was subdued associated with an authoritarian system of government. In the late 1970s a new era started with a Marxist sense of justice but environmental issues were secondary (Van Eeden & Brink, 2007). In the Far West and the West Rand goldfields (FWaWRGF) in the Western Gauteng and Eastern parts of North West Province, environmental activism up to the 1990s was driven by self-interest and motivated mainly by damages suffered by farmers, landowners or occupiers of land polluted by mining operations (Van Eeden, 2006; Fagan, 2005; Massyn, 2009). Generally the affected parties, by means of litigation, endeavored to stop the mining companies causing a nuisance (Van Eeden et al, 2009b; Liefferink, 2006—2010). The disgruntled parties were often bought off.

According to FSE leadership POEA: "essentially answers to the call of environmental and social justice, morality and equity. It is not motivated by narrow self-interest, but instead pursues objectives to protect the rights of indigent and sometimes ill-informed members of urban mining communities. It is built on the real voices and engagement of ordinary people". (Walsh, 2007; Liefferink, 2006—2010; Tempelhoff, 2007c; 2007d; 2007e). In the FWaWRGF the FSE is supported by a grassroots movement and is centered on broad-based community participation (Anon., 2007a; 2007b; 2008; 2009; Avni, 2007a; 2007b; 2007c; Von Moltke, 2007). This paper will present a timeline of the changes which have taken place through POEA with respect to the remediation of disturbed land and water from mining in the FWaWRGF.

## Land degradation: a concise historical scenario of the FWaWRGF

Gold mining started in the early 20th Century in FWaWRGF with the exploitation of the West Wits (Gold) Line. 45 500 tons of gold were extracted during 120 years of gold mining activities within the Witwatersrand Basin but left a legacy of 221 million tons of mineral waste and more than 270 tailings dams in the Witwatersrand Basin, covering approximately 400 km² in surface area.

With time a large historically rich environment transformed into a "disastrous, polluted and health concerned state" (Compare Jacobs, 2003; Van Eeden et al, 2009a). The wheel of real action by government against FWaWRGF mining companies did not turn efficiently and fast enough to ameliorate the impacts of AMD and radiological contamination. It is hoped that the recent intervention (March 2010) by Government (RSA, SAGI, 2010) will provide some relief to the situation. Due to POEA more was accomplished in the past three years (2007—2009) regarding creating an

awareness on all community levels, and to activate plans of action to remediate, than in the preceding 60 to 70 years of gold mining in the area (Van Eeden & Brink, 2007).

#### Activism in the West and Far West Rand

The POEA strategy is based on knowledge gained from working through regularly updated scientific and official reports on the environment conditions in the FWaWRGF region (Liefferink, 2006—2010). The role of the activist is to disclose the findings of reports to the public thus leading to pressure on the Government to act according to the findings and recommendations of these reports. (Compare Tempelhoff, 2007a; Eybers, 2008; Ferreira, 2010; Liefferink, 2006—2010). Table 1 summarizes the activities within the timespan in which they took place.

Table 1 A chronicle classification of activism in the FWaWRGF between 2007 and 2010

Method	Number
Workshops and site visitations	252
Academic symposiums, conferences and seminars	84
Distribution of pamphlets, brochures and questionnaires	16 800
News media reports, including radio interviews and television screenings	750
Submission to Parliamentary Portfolio Committees and Provincial Legislature	12
Submissions to the South African Human Rights Commission and the Public Protector	6
Protest Marches, Presentation of Petitions and Picketing	35

These activities led to development of a Remediation Action Plan (RAP) for the area, as well as the associated Public Involvement and Participation (PIP) process, and in 2008, the establishment of the Wonderfontein Regulators' Steering Committee (WRSC) at the helm of the process to steer the whole remediation process. The NNR of South Africa chairs the WRSC (see above) presently exercises stricter control over mine effluents (Liefferink, 2006—2010) with the Department of Water Affairs (DWA) which is controlling water use through issuing water licenses in the Far West Rand. The DWA works since 2008 with a Team of Experts (TOX) selecting areas in urgent need of applying the polluter pay principle. (Liefferink, 2006—2010).

#### Conclusions

The timelines of promulgated Acts relevant to the protection of health and environment by the South African government, clearly reflect the activities starting at the grassroots, supported by the media. The ever increasing environmental awareness through the activities of the POEA has brought progress and will bring improvements in the remediation of mine wastes and water in the country.

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